

8. (amended) The method according to claim 5, characterised in that a long-wave fraction of the radiation is filtered out and used for determining the rim of the earth.

9. (amended) The method according to claim 5, characterised in that the rim of the earth is determined by fitting earth models.

Please add the following new claims:

10. (new) The sensor system according to claim 2, characterised in that the aperture for the light from the earth is considerably smaller than the aperture for the starlight.

11. (new) The sensor system according to claim 3, characterised in that the aperture for the light from the earth is considerably smaller than the aperture for the starlight.

12. (new) The method according to claim 6, further characterised by model-based tracking of the rim of the earth.

13. (new) The method according to claim 6, characterised in that a long-wave fraction of the radiation is filtered out and used for determining the rim of the earth.

14. (new) The method according to claim 7, characterised in that a long-wave fraction of the radiation is filtered out and used for determining the rim of the earth.

15. (new) The method according to claim 6, characterised in that the rim of the earth is determined by fitting earth models.

16. (new) The method according to claim 7, characterised in that the rim of the earth is determined by fitting earth models.

17. (new) The method according to claim 8, characterised in that the rim of the earth is determined by fitting earth models